

Figure 1

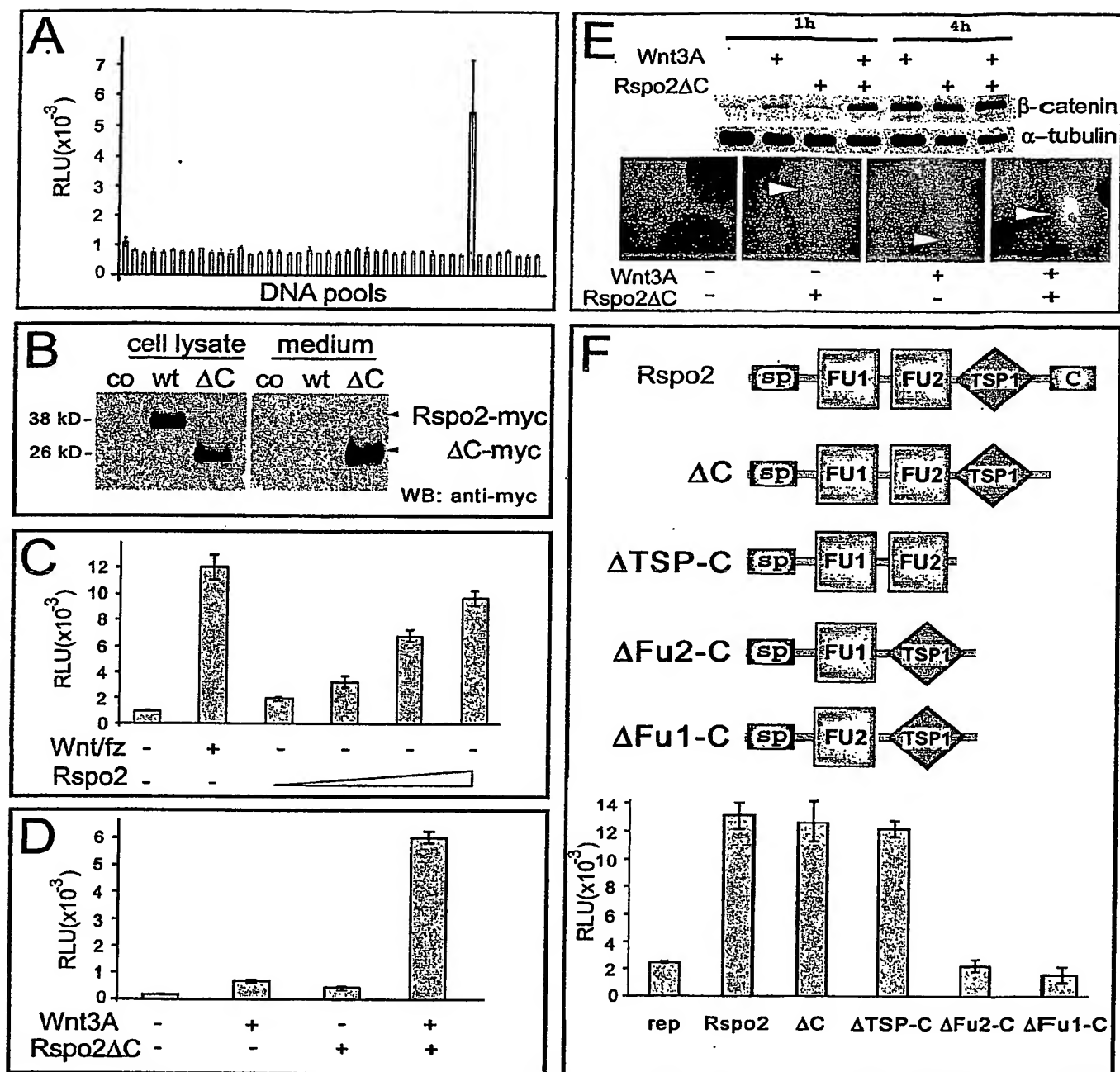


Figure 2

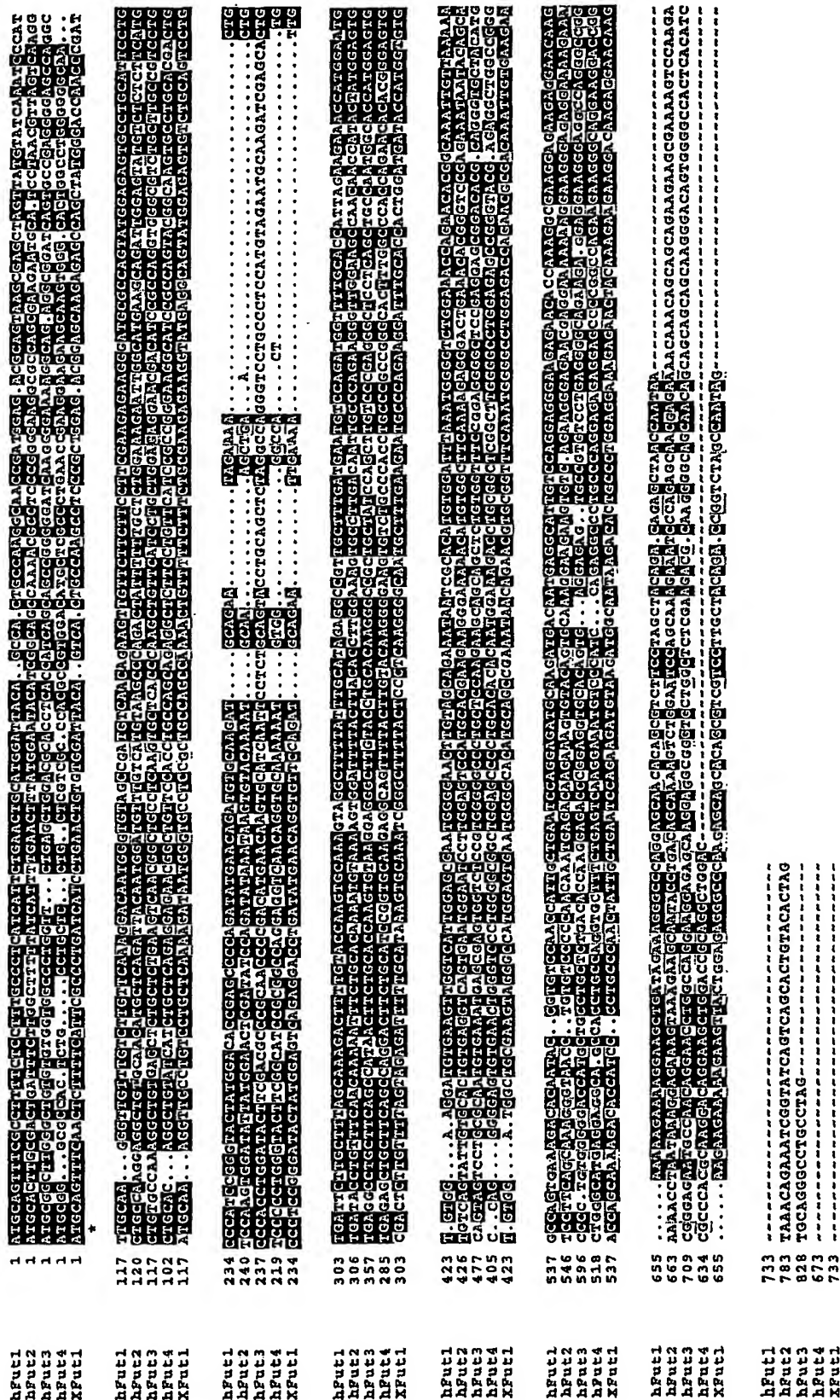


Figure 3

hFut1	1	MQFRFLSFALILLNCDYSHCO.GNRWRRSRASVVSNPICKG.CLSCSKNGCSCRCCQQR
hFut2	1	MLRLISWLFILNFMFYIGSQNASRGRORRMHPNVSQCCQGGCATCSQYNGCLSCCKPK
hFut3	1	MRGLCVVALVSWTHLTISR.GIGGRQRRIASAGSOACAKGCELCSEVNGCLKCSPP
hFut4	1	MRAPLCLLLVAHAVDMLALNR.....RKQVGTGCGNCTG.CFICSEENGCSSTCQQR
hFut1	59	LFFFLRREGIRQYGECLHSCPSGYGHRAPDMNRCAAR.....CRIENC
hFut2	61	LFFALERIGKQIGVCLSSCPSGYGTRYPDNNCTK.....CKAD.C
hFut3	60	LFILLERNDRQVGVCLPSCPYPGYDARNPDNNCINSSAVPAALGQGPALHVECKIEHC
hFut4	54	LFLFRRREGIRQYCKLCHDCPPGYGIRGQEVNRCCK.....CGAT.C
hFut1	102	BSCFSKDECTCKKVGFYLHGRGSRFDECPGCFAPLEETMECEG..CEVGHWSEWGTCSRN
hFut2	103	DTCFNKNFCTKCKSGFYLHLGKCLDNCPGLEANNHTMECVSIVHCEVSEWNPWSPCTKK
hFut3	120	PAFCFSNFCTKCKEGLYLHKGKCYPA CPEGSSAANGTMECSPAQCEMSEWSPWGPCCKK
hFut4	96	ESCFSQDFCIHCKRQFYLYKGCCLPTCPFGLLAHONTRECQGE..CEIGPWGGWSPCTEN
hFut1	160	NETCGFKWGLETRTRQLVAKPKVKDTPCPTIAESRRCKMTMRHCPGCKRT...PKKAEER
hFut2	163	GKTCGFKRGTETRVREIQQPSAKGNLCPPTNEERRCTVORKKCKGGERG...KKGREER
hFut3	180	QQLCGFRRGSEERTRWTHAPVEDHAACSDTKERRCTVRRVPCPEGOKR...RKGGQGR
hFut4	154	GKTCGSAWGLESRVREAGRAGHEEATTCQVISEERRCPQOR.PCP.GERSPGQKKGRKDR
hFut1	217	NKK..K...KRKLIERAQEGHVSFATDRANO.....
hFut2	220	RKKPNKGESKEAMPDSKSLSSKEEPEQRENKQQQKKRKVQDKQKSVSVTVH
hFut3	237	REN.....ANRNLARKEESKEAGAGS.RRKGGQQQQQQQGTGTVGPLTSAGPA~~~
hFut4	212	RPR.....KDRKLDRLD~~~~~

Figure 4

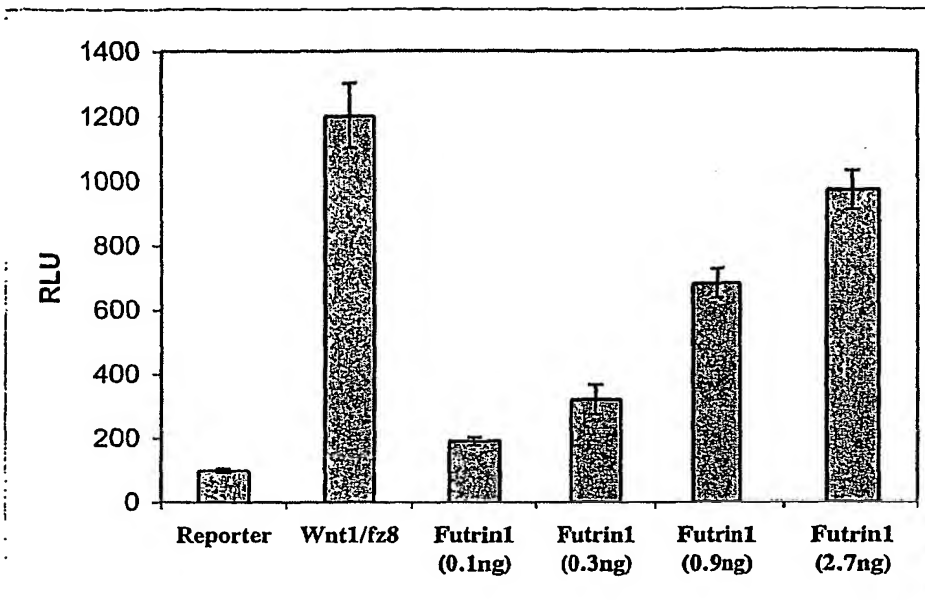
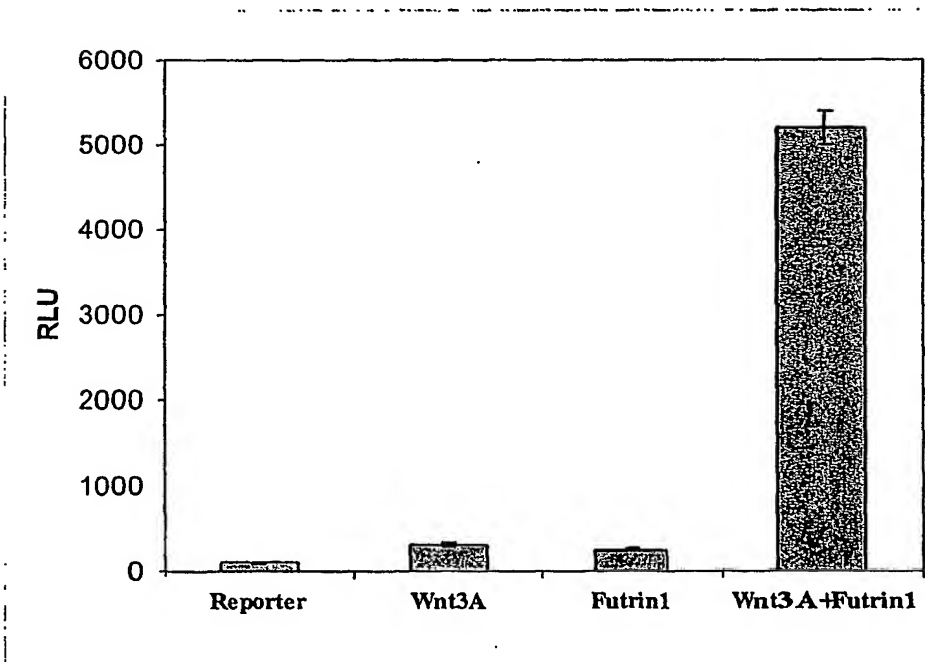
A**B**

Figure 5

A

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hR-spondin1 1  MRLLGLCVVALVLSWTHLTISR . GIKGKRQRRTSARGSQACAKGCEL CSEVNGCLKCSPK
hR-spondin2 1  MQFRIFSFALLIILNCMDVSHCO . GNRWRRSRKRASYVSNPICKG . CLSCSKDNGCSRQOQK
hR-spondin3 1  MHLRLISWLFALLNFMEYIGSQNASRGRQRQRHHPNYSQCCGGCATCSDYNGCLSCKPK
hR-spondin4 1  MRAPLCQLLLLVAAHAVDMLALNR . . . . . RKQVGTGLGGNCTG . CII CSEENGCTCQQR

          signal peptide                                furin-like domain 1

hR-spondin1 60  LFFILLRNDLRQVGVCLPSCPFGYFDARNPDMNKCI . CKIEHCEACFSHNFCTKCKEGLY
hR-spondin2 59  LFFELLRRCMRQVGECLHSCPSGYTGHRAPDMNRCAACRIENCDCFSKDFCTKCKVGFY
hR-spondin3 61  LFFALERIGMKQIGVCLSSCPSGYTGTRYPDINKCTKCKAD . CDTCFNKNECTKCKSGFY
hR-spondin4 54  LFLFLIRREGIRQVCKLHDCPPGYFGIRGOEVNRCKKCGAT . CESCFSDPFCIRCKRQFY

          furin-like domain 2

hR-spondin1 119 LHKGRQCPACPEGSSAANGTMECS SPAQCEMSEWSPWGPCSKKQQLCGFRRGSEERTRRM
hR-spondin2 119 LHRGRSFDECPDGFAPLEETMECV . . CEVGHWSEWGTCSNNNTCGFKWGLETRTRQI
hR-spondin3 120 LHLGKCLDNCPGLEANNHTMECVSIVHCEVSEWNPWSPCTRKGKTCCGFKRGCTETRVREI
hR-spondin4 113 LYKGRCLPTCPPGTLAHQNTRECOGE . . CELGPWGGWSPCTHNGKTCGSAWGLESRVREA

          thrombospondin type 1 domain

hR-spondin1 180 LHPVGDHAAACSDTKETRECTVRVPCPEGQKR . . . . . RKGGQGRREN . . . . . ANRNLARKE
hR-spondin2 160 VKKPVKDTIPCPTIAESRRCKMTMRHCPGCKRT . . . . . PRAKEKRNKK . . . . . KRKLIERA
hR-spondin3 163 LQHPSSAKGNLCPPPTNETRKCTVQREKKCKQGERG . . . . . KKGRERKRRKPNKGESKEATPDSK
hR-spondin4 154 GRAGHEEAATCOVLSESRKCPQIR . PCP . GERSPGQKKGRKDRER . . . . . KDRKLDRLR

hR-spondin1 231 SKELAGAGSRRRKGGQOQOQOQGTVGPLTSAGPA----
hR-spondin2 229 QEGHSVFTATDRANQ-----
hR-spondin3 237 SLSSSKETFEQRENKQOQKRRKVQDKQKSVSVSTVH
hR-spondin4 224 D-----

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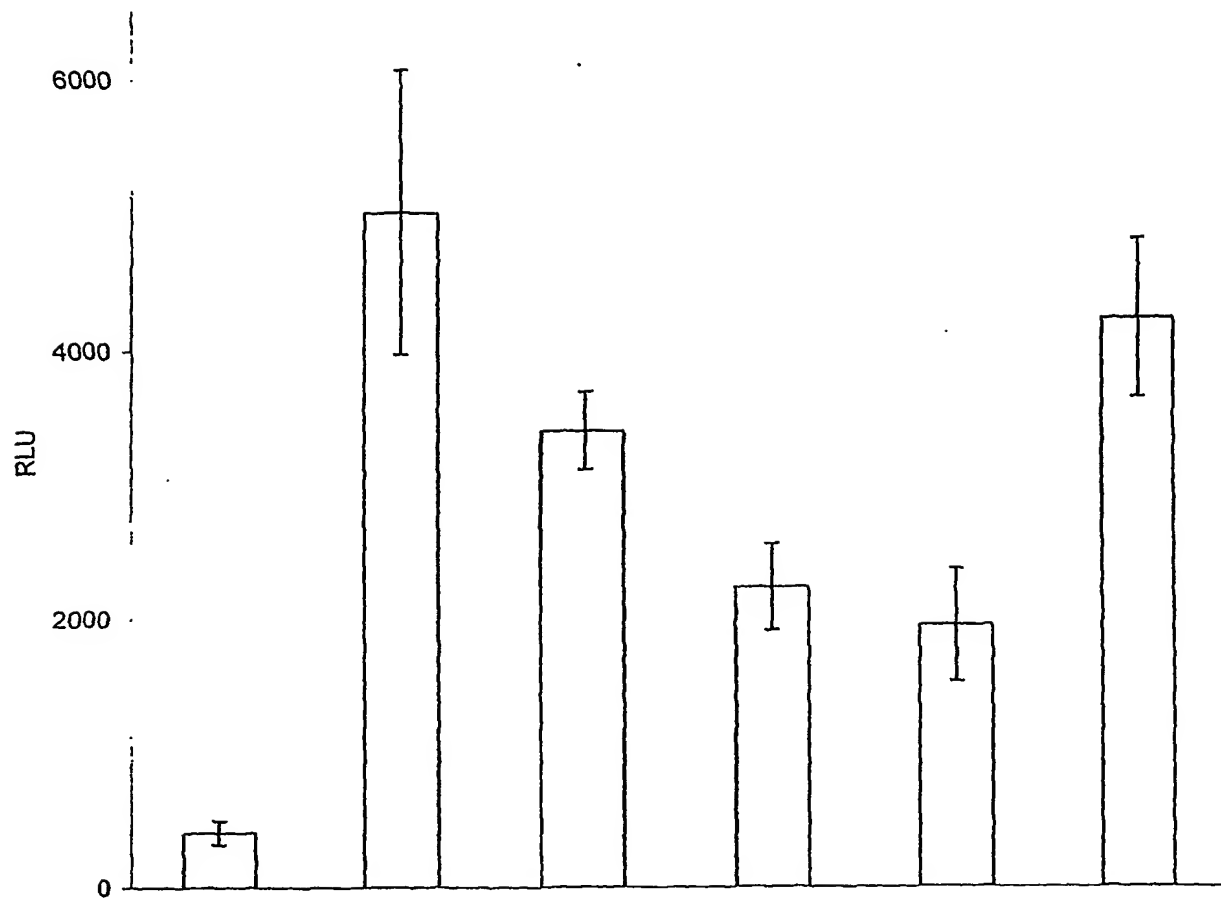
B

hRspo2	39.9		
hRspo3	43.7	45.9	
hRspo4	40.3	43.9	41.2
	hRspo1	hRspo2	hRspo3

C

mRspo2	40.5	95.5	44.2	44.8
XRspo2	40.8	83.5	43.8	42.2
	hRspo1	hRspo2	hRspo3	hRspo4

Figure 6



pSuper Non.	+	+				
pSuper hFut1			+		+	+
pSuper hFut2				+	+	+
Wnt3A med.	-	+	+	+	+	+
mFut1						+

Figure 7

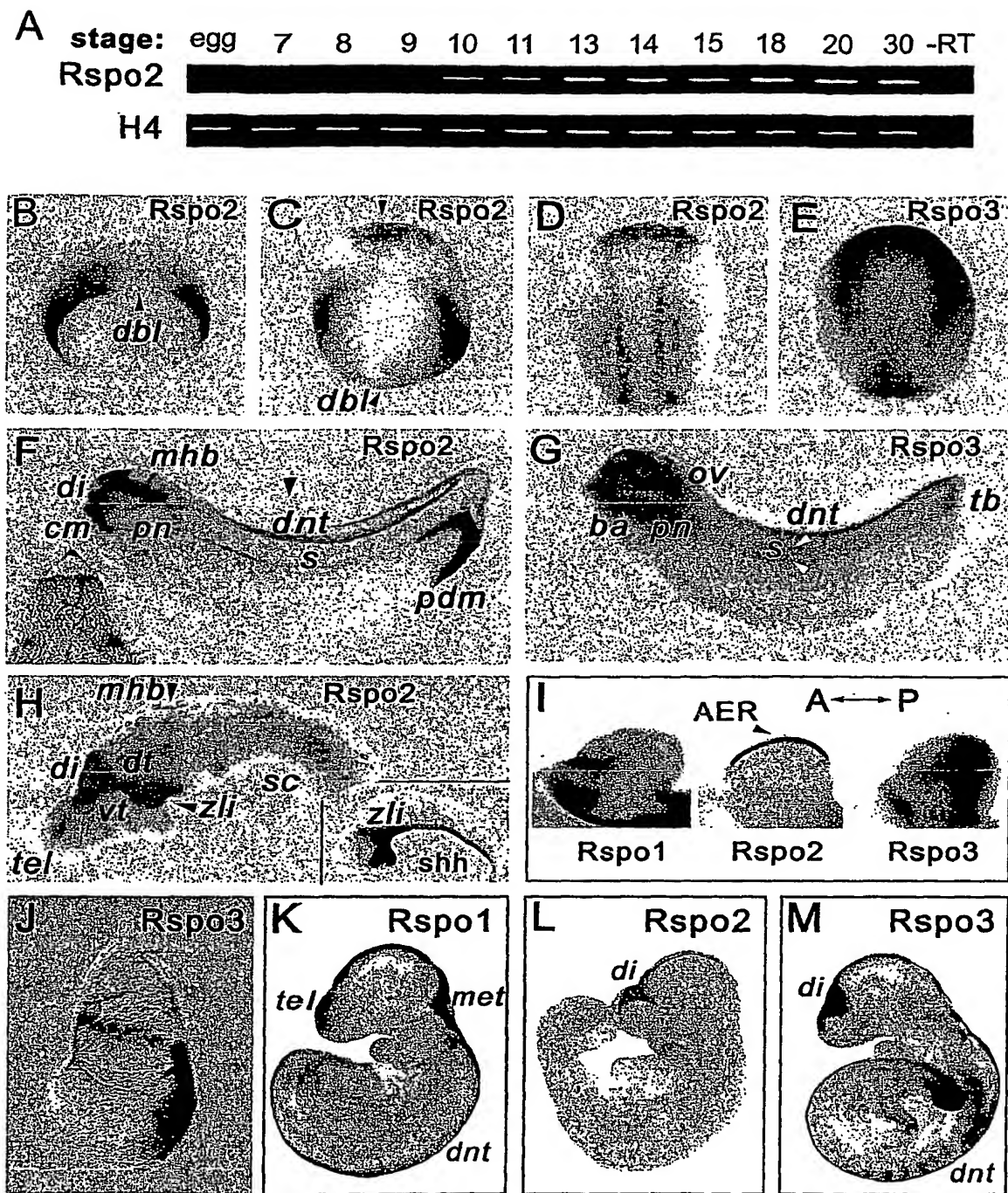


Figure 8

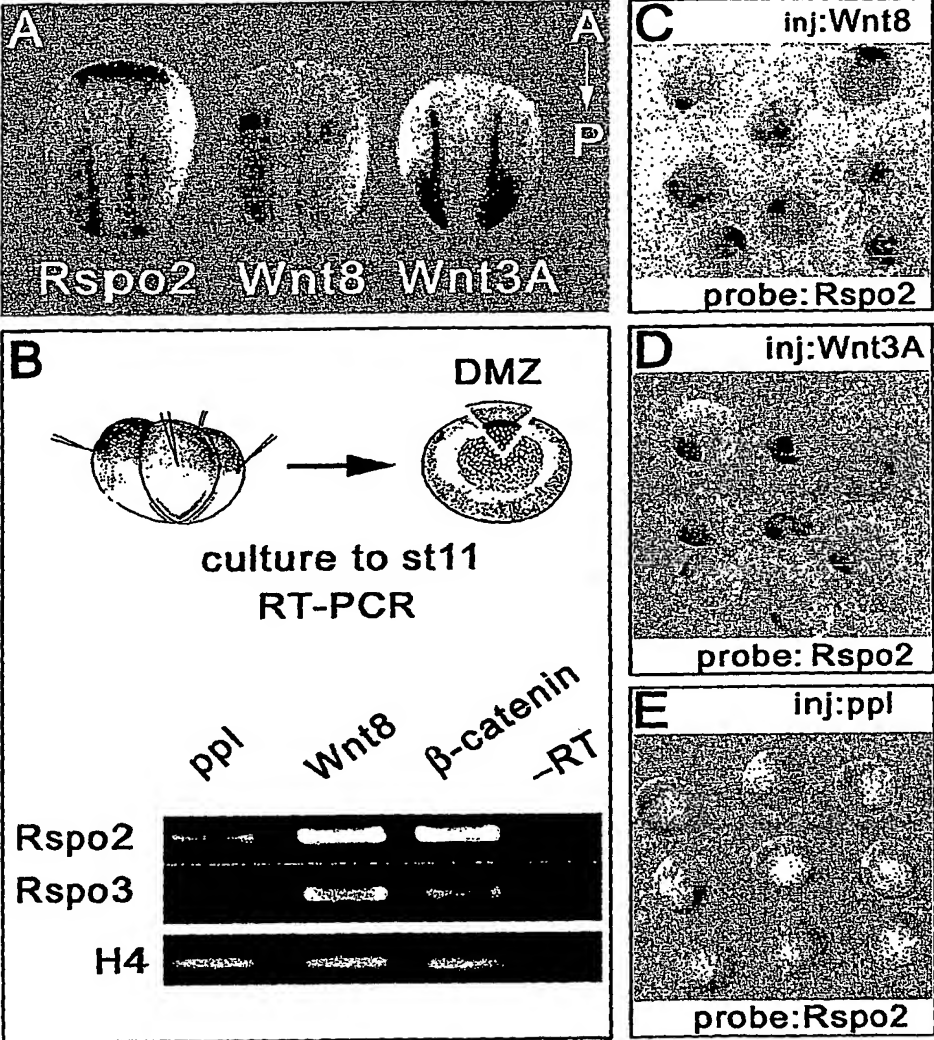
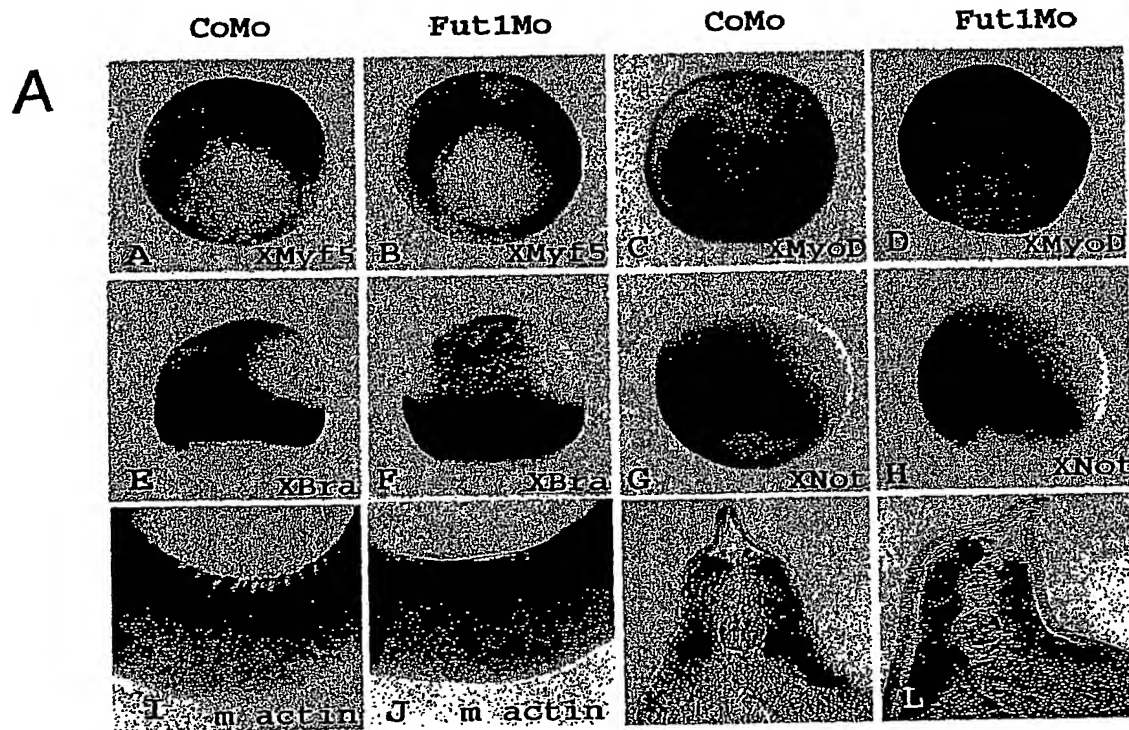
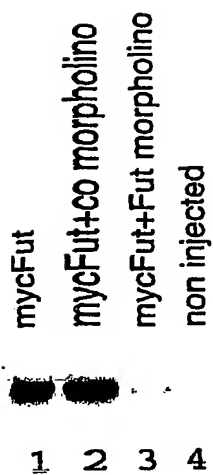


Figure 9



B



C

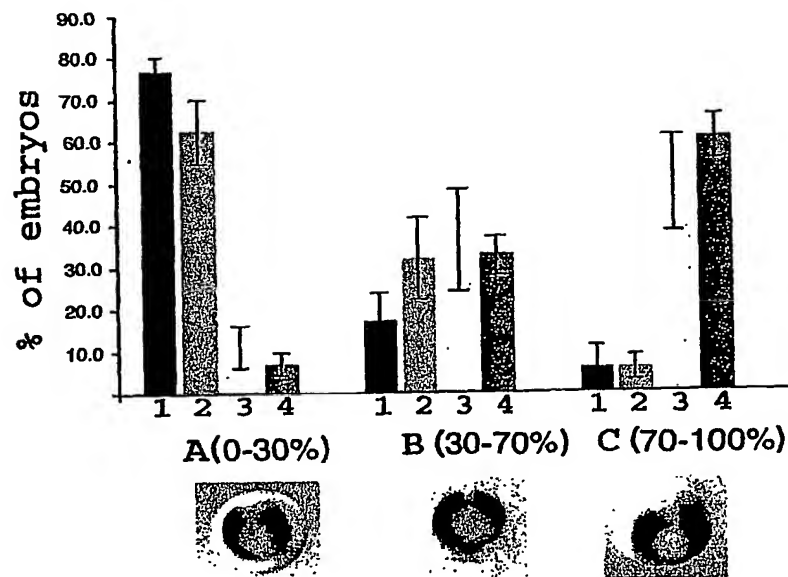


Figure 10

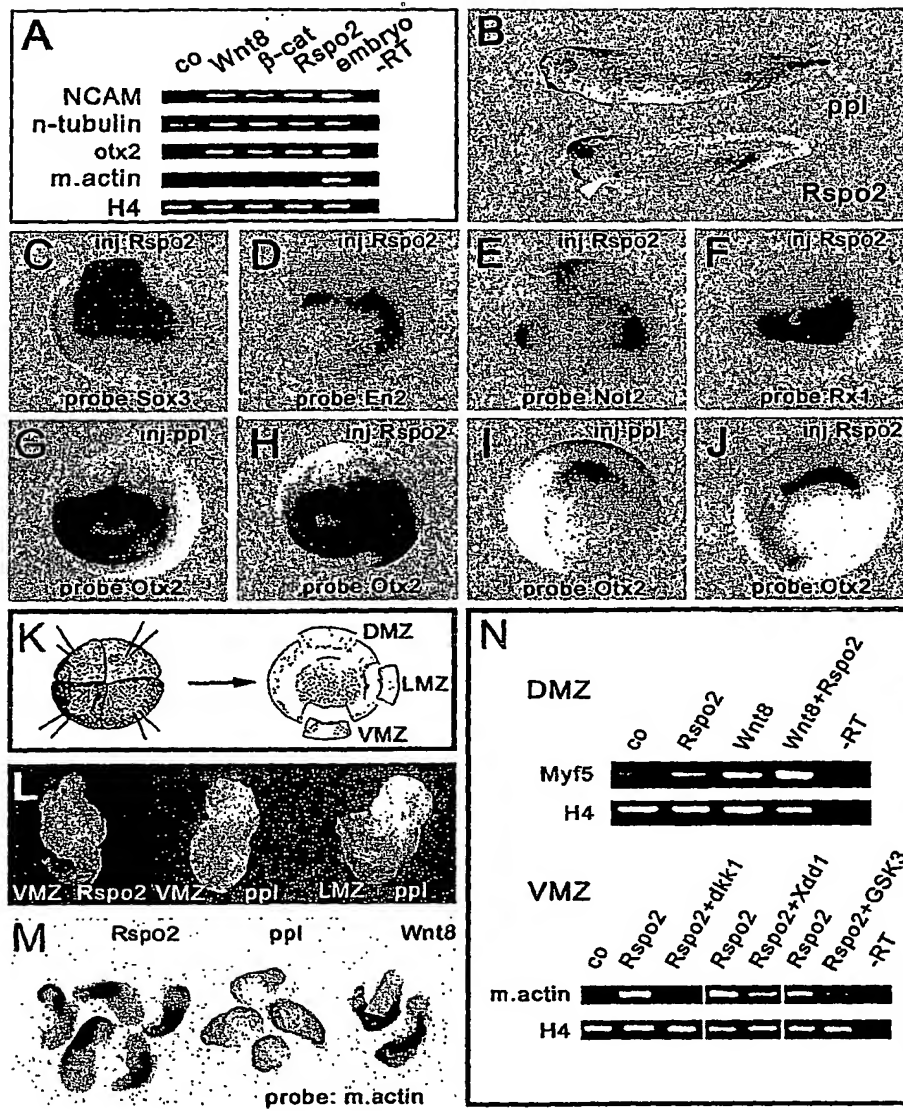


Figure 11

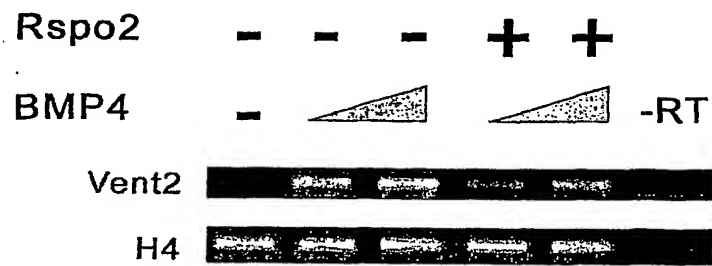
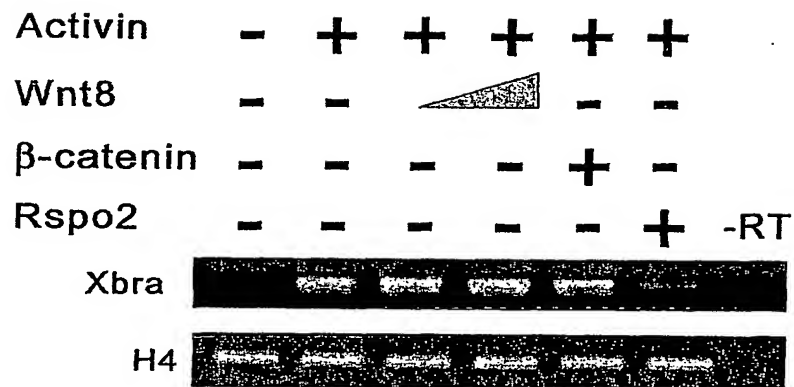
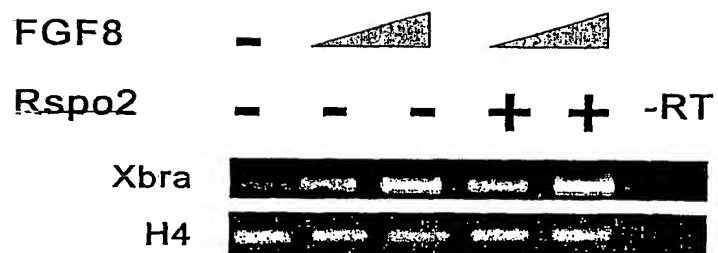
A**B****C****D**

Figure 12

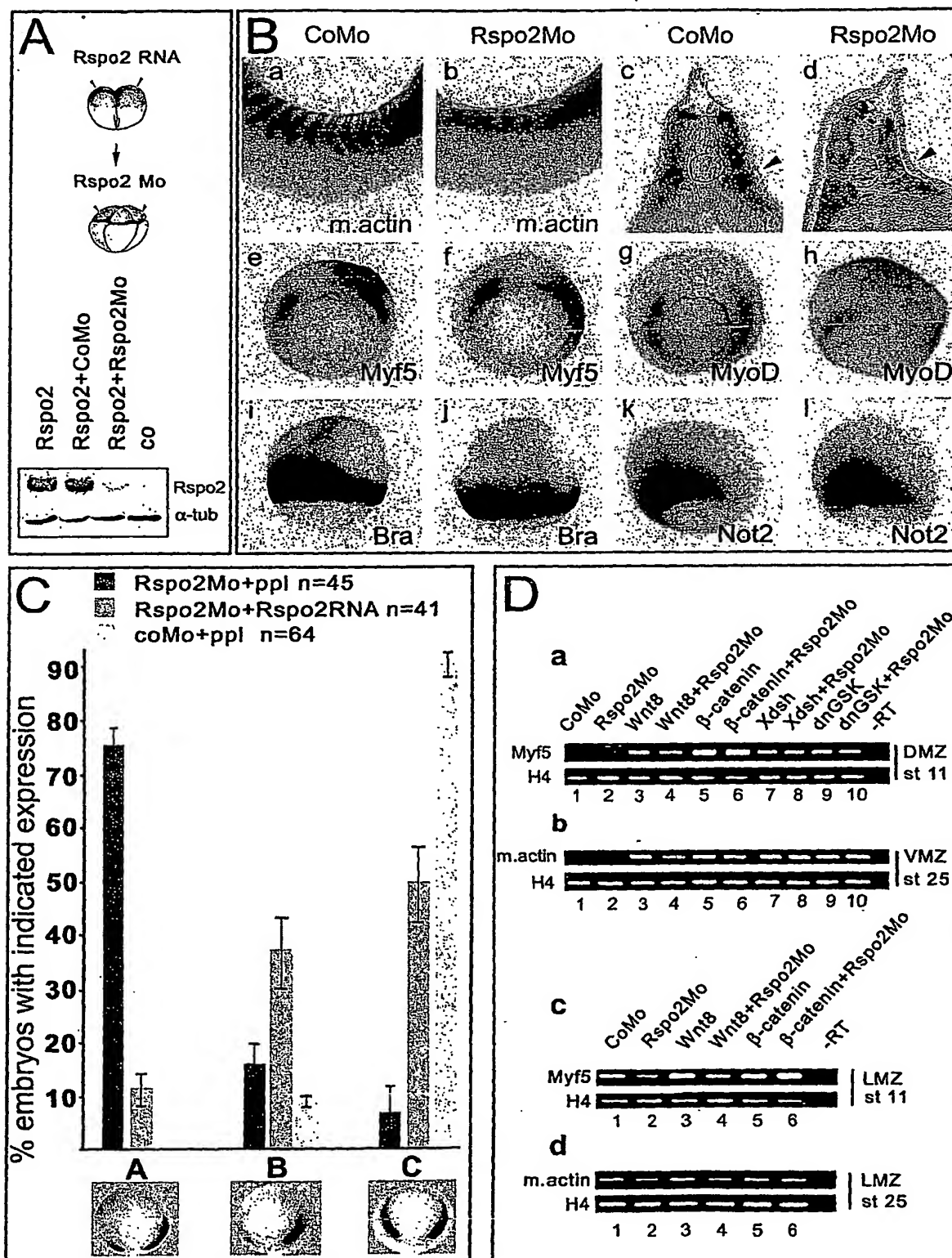


Figure 13

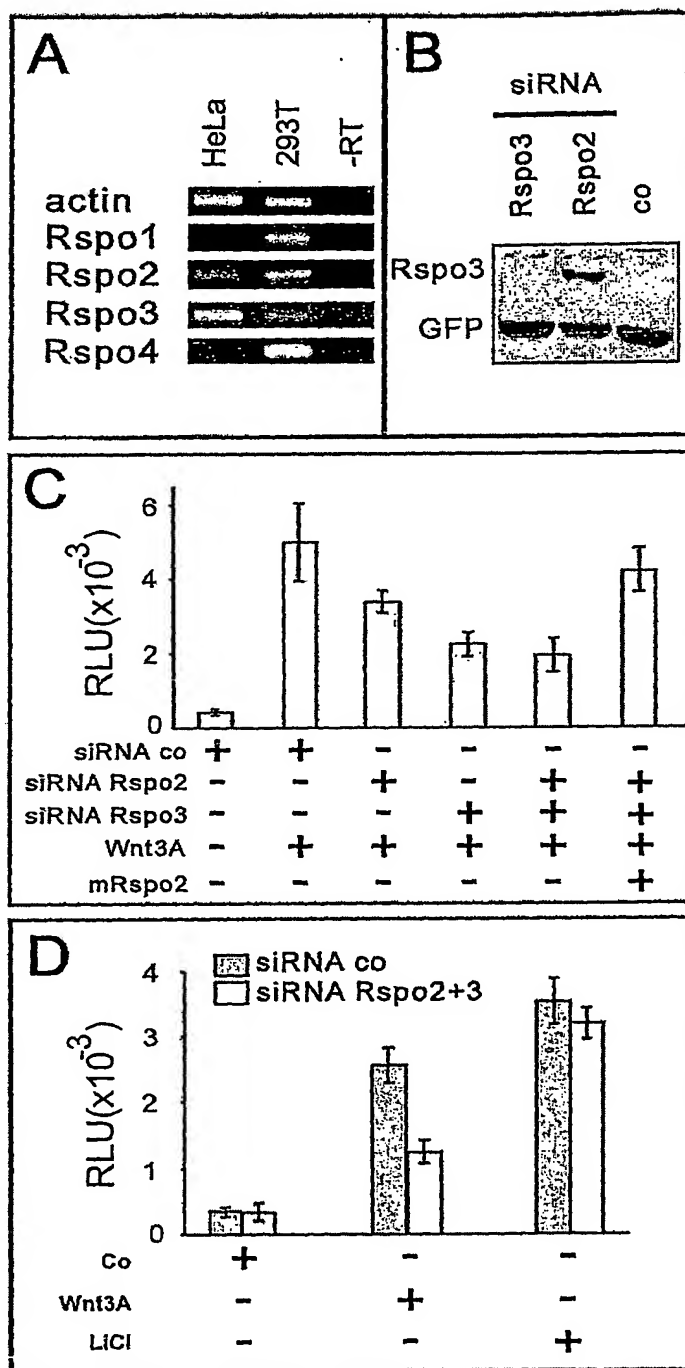


Figure 14

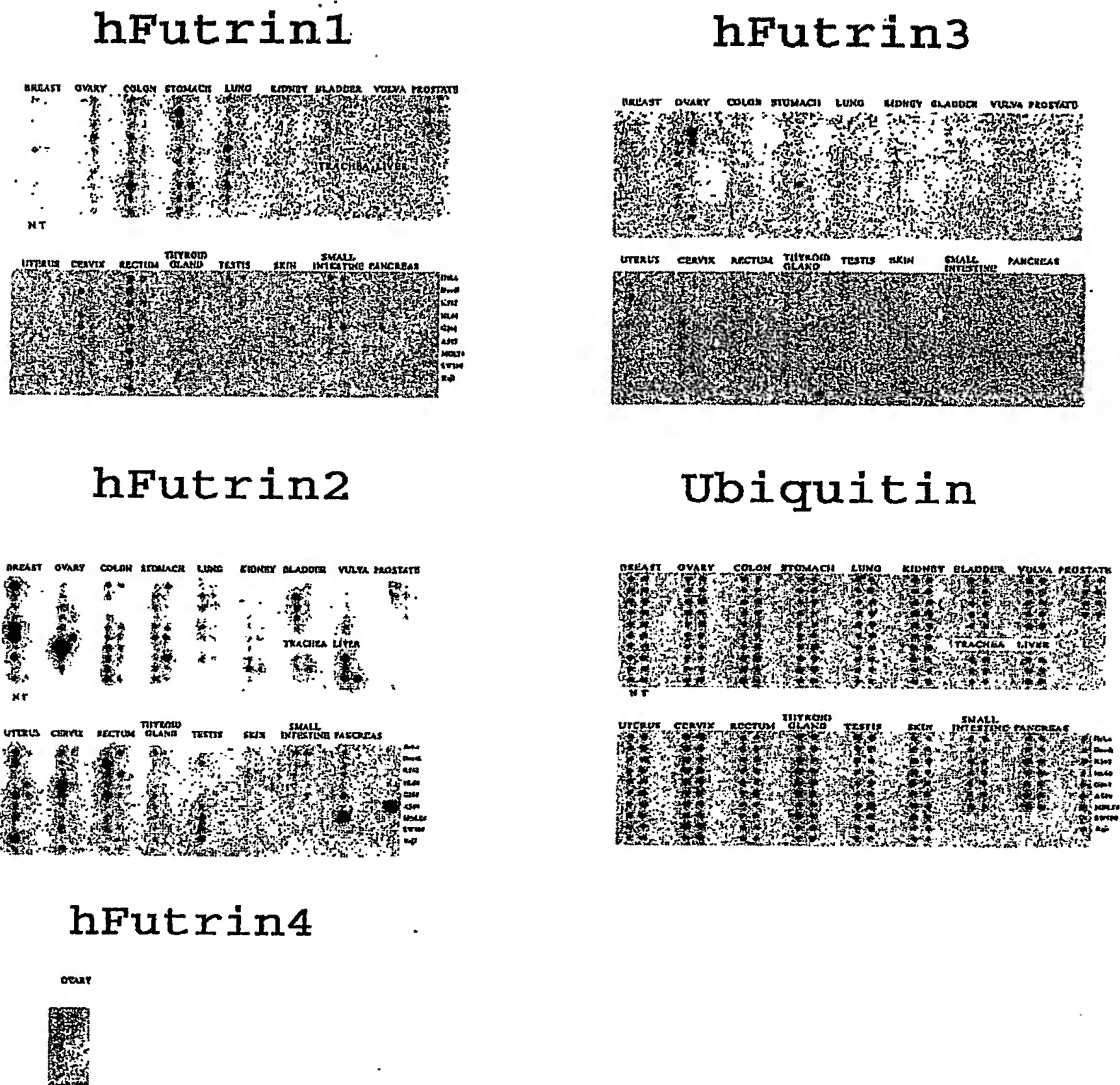


Figure 15

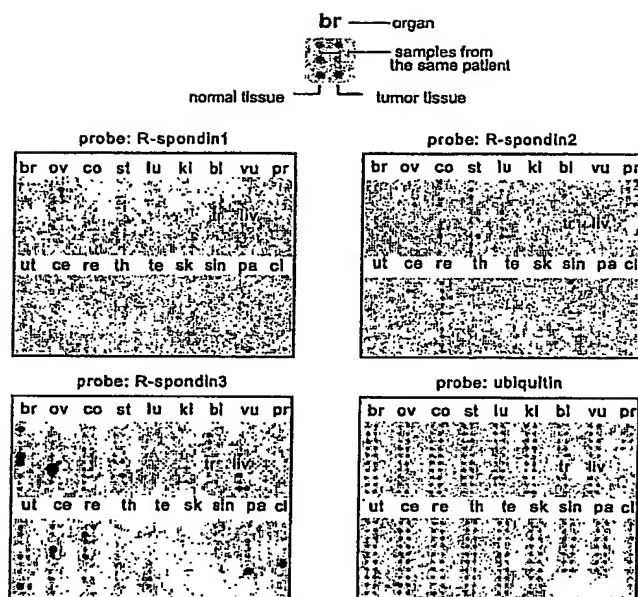


Figure 16

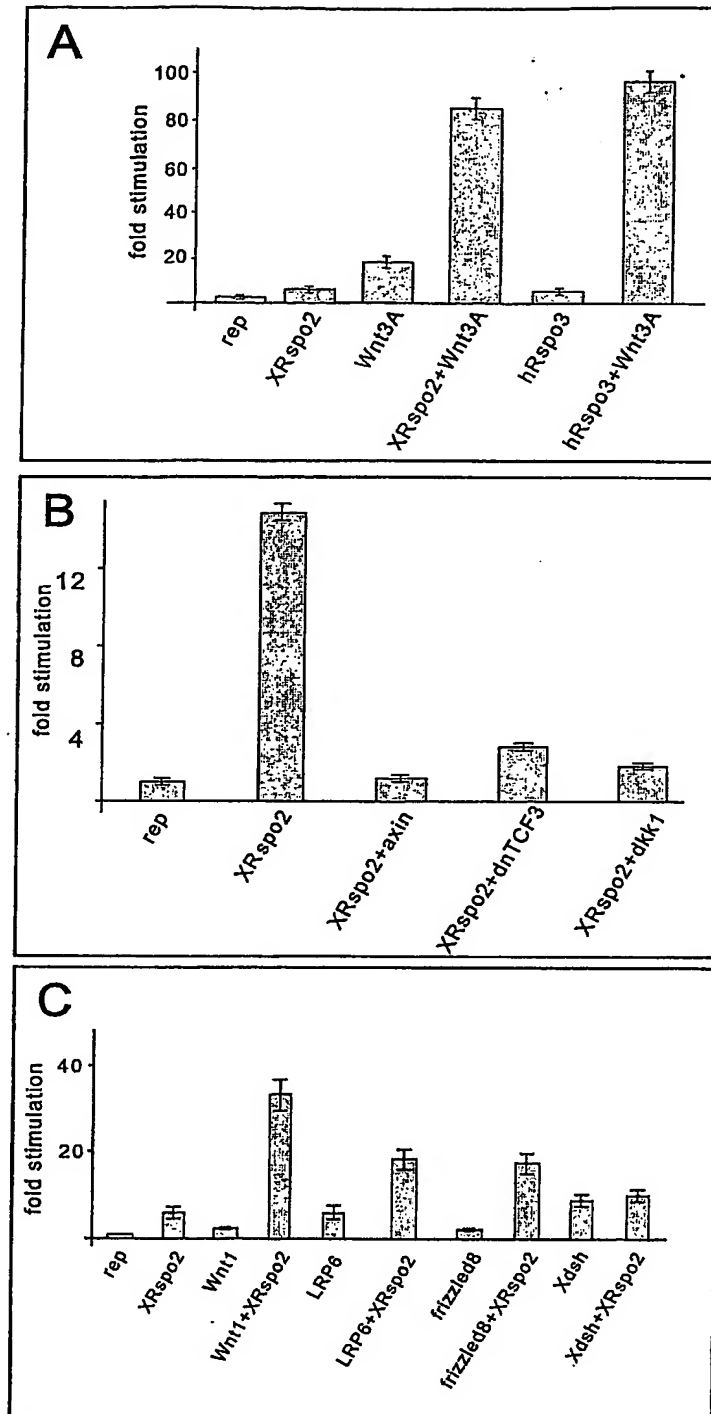


Figure 17